

REMARKS

Favorable reconsideration of this application, in light of the following discussion, is respectfully requested.

Claims 9-19 are pending and under consideration.

This amendment is believed to place the application in condition for allowance, and entry therefore is respectfully requested. In the alternative, entry of this amendment is requested as placing the application in better condition for appeal by, at least, reducing the number of issues outstanding.

Entry of Amendment under 37 C.F.R. § 1.116

The Applicant requests entry of this Rule 116 Response because the amendment does not alter the scope of the claims and places the application at least into a better form for purposes of appeal. No new features or new issues are being raised.

The Manual of Patent Examining Procedures (M.P.E.P.) sets forth in Section 714.12 that “any amendment that would place the case either in condition for allowance or in better form for appeal may be entered.” Moreover, Section 714.13 sets forth that “the Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified.” The M.P.E.P. further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

I. Rejection under 35 U.S.C. § 103

In the Office Action, at pages 3-9, claims 9-11, 14, and 18-19 were rejected under 35 USC § 103(a) as being unpatentable over Rogard et al. (U.S. Patent No. 7,062,294) in view of Nakanishi et al. (U.S. Patent Application Pub. No. 2004/0053582).

The Examiner acknowledges that Rogard et al. does not discuss or suggest:

the transmitting network-side antennas being selected as only the network-side antennas that received the signaling message from the mobile station,

as recited in claim 9. The Examiner attempts to make up for this deficiency in Rogard et al. with Nakanishi et al. However, it is respectfully submitted that Nakanishi et al. fails to make up for this deficiency. Claim 9 provides for transmitting a user data message to the mobile station using only the network-side antennas that received the signaling message from the mobile station. By using only these antennas, the invention of claim 9 avoids using other unnecessary antennas that may create undesirable interference. In contrast to claim 9, Nakanishi et al.

merely discloses, in paragraph [0026], that a receive-only antenna that has a good reception quality in a receiving slot can be used as a transmitting antenna in the next transmitting slot in order to improve transmission quality. In other words, Nakanishi et al. teaches a mapping of the receive-only antennas to the transmit-only antennas in order to keep the antenna pattern constant for the separate receiving and transmitting cases. For the transmit and receive antennas, the antenna pattern is kept constant because the same antenna is used. As such, Nakanishi et al. merely teaches selecting a transmit antenna based on reception quality and does not teach selecting transmitting network-side antennas based on whether or not the network-side antennas received a signaling message from the mobile station.

As a non-limiting example, it is possible that the signaling message from the mobile station may be received by a network-side antenna, but the network side antenna may be far enough away from the mobile station that the signal is weak. However, according to claim 9, this network side antenna would still be included in the group of network side antennas used to transmit the user data message to the mobile station. In contrast, Nakanishi et al. would not select such an antenna for transmission because the reception quality of the signal is poor and Nakanishi et al. teaches selecting a transmitting antenna based only on reception quality.

Since the combination of Rogard et al. and Nakanishi et al. does not discuss or suggest all of the features of claim 9, claim 9 patentably distinguishes over Rogard et al. and Nakanishi et al. Accordingly, withdrawal of this § 103(a) rejection is respectfully requested.

Claims 10-11 and 14 depend either directly or indirectly from claim 9, and include all the features of claims 9, plus additional features that are not discussed or suggested by the references relied upon. Therefore, claims 10-11 and 14 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of these § 103(a) rejections is respectfully requested.

More specifically, claim 10 provides that the request message is sent at regular intervals (i.e., periodically), whereas Rogard et al. sends the paging repeatedly while scanning the complete cell with the smart antenna (i.e., Rogard et al. sweeps with an antenna beam through the cell).

Claim 11 provides that the request message is repeated after a certain time span. Rogard et al. merely teaches that for the first page a directional antenna beam is used and for the repeat page a non-directional antenna beam is used.

Claim 14 provides that the request message is sent via a plurality of antennas belonging to one cell. Rogard et al. discloses a downlink transmission unit coupled to the antenna

elements in column 4, lines 63 to 65. This implies that the transmission occurs via one sub-beam of the antenna only. For a sub-beam all antenna elements are used to focus the antenna pattern, whereas for an antenna pattern covering the complete cell a fraction of the antenna elements (arrays of antenna elements; described in column 4 lines 1 to 2) are required.

In Figure 1 Rogard et al. shows several antennas on the base station. Furthermore, the cell in that figure spans the area covered by the antennas pointing in different directions. In conventional radio planning each direction of the antennas forms a sector or radio cell having a separate cell ID. This explains the large number of antennas on the base station in Figure 1. One antenna is used for transmission and two antennas for reception per sector or direction. Thus, Rogard et al. requires nine antennas for the base station in Figure 1.

The combination of Rogard et al. and Nakanishi et al. does not discuss or suggest:

means for choosing transmitting network-side antennas from the plurality of network-side antennas, the transmitting network-side antennas being chosen as only the network-side antennas that received the signaling message from the mobile station,

as recited in claim 18, so that claim 18 patentably distinguishes over Rogard et al. and Nakanishi et al. Accordingly, withdrawal of this § 103(a) rejection is respectfully requested.

The combination of Rogard et al. and Nakanishi et al. does not discuss or suggest:

choosing transmitting network-side antennas from the plurality of network-side antennas, the transmitting network-side antennas being chosen as only the network-side antennas that received the signaling message from the mobile station,

as recited in claim 19, so that claim 19 patentably distinguishes over Rogard et al. and Nakanishi et al. Accordingly, withdrawal of this § 103(a) rejection is respectfully requested.

In the Office Action, at pages 9-14, claims 12-13 and 15-17 were rejected under 35 USC § 103(a) as being unpatentable over Rogard et al. and Nakanishi et al. in view of various combinations of Lim et al. (U.S. Patent No. 7,209,764), Angus et al. (U.S. Patent No. 6,097,969), and Newson et al. (U.S. Patent No. 6,320,898).

None of Lim et al., Angus et al., and Newson et al., alone or in combination, make up for the deficiencies in Rogard et al. and Nakanishi et al. discussed above with respect to claim 9.

Claims 12-13 and 15-17 depend either directly or indirectly from claim 9, and include all the features of claims 9, plus additional features that are not discussed or suggested by the references relied upon. Therefore, claims 12-13 and 15-17 patentably distinguish over the

references relied upon for at least the reasons noted above. Accordingly, withdrawal of these § 103(a) rejections is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

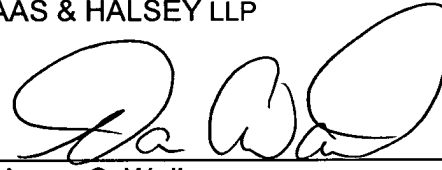
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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